Amendments to the Specification:

Please replace paragraph [0002] on pages 1 and 2 with the following amended paragraph below:

[0002] As originally described, a jet spouted fluidised bed dryer consists essentially of a vertical chamber in which the lower part is conical with its narrow end at the bottom, and in which the upper part is a cylinder having essentially the same diameter as the upper wide end of the lower conical part. The top end of the cylinder is closed by an essentially flat horizontal plate which includes a gas outlet. The chamber also contains a suitable quantity of inert carrier particles. A hot high velocity gas stream is injected into the dryer at the lower end of the conical lower part through a gas inlet port, which serves to fluidize and to spout the carrier particles. At the junction of the gas port and the lower end of the conical part a suitable screen is provided to prevent the carrier particles from entering the gas port. The heated carrier particles are initially propelled by the hot gas substantially vertically from near to the screen toward the flat plate closing the top of the cylindrical part. In order to prevent the carrier particles escaping through the gas outlet, a suitable screen is provided near the top of the chamber. In the region underneath the screen, and underneath the horizontal plate around the screen, the hot carrier particles undergo high velocity collisions with each other, with the chamber walls and with the underside of the screen. The carrier particles then return to the bottom of the chamber in a flow near to the inside of the cylindrical and conical chamber walls. The dryer also includes at least one feed port for the slurry of material which is to be dried. The feed ~~ports;~~ port, or ports, is/are often located near to the narrow end or near to the wide end of the lower conical part of the chamber.

Please replace paragraph [00012] on pages 5 and 6 with the following amended paragraph below:

[00012] Thus in a first embodiment this invention seeks to provide a jet spouted ~~fuidised~~ fluidised bed drier for the drying of a slurry of biomaterials including in combination:

- a hot gas inlet means constructed and arranged to allow the passage of hot high velocity gas into the bottom of the chamber in a substantially upward vertical direction;

- a first lower conical member in which the cone axis is substantially vertical having its lower narrow end connected to the hot gas inlet and having an upper wide end and a first internal cone angle;

- a first lower screen located in the first conical member adjacent its connection with the hot gas inlet means;

- a second upper conical member in which the cone axis is substantially vertical and coaxial with the cone axis of the first conical member having its lower wide end connected to the upper wide end of the first conical member and having an upper narrow end and a second internal cone angle;

- a hot gas outlet means connected to the upper narrow end of the second conical member constructed and arranged to allow the passage of hot high velocity gas from the upper narrow end of the second conical chamber in a substantially upward vertical direction;

- a second upper conical screen having a cone axis, an upper wide end, a lower closed end and a third internal cone angle;

- a suitable quantity of inert carrier particles contained within the first and second conical members; and

- at least one inlet port for the slurry of biomaterials constructed and arranged to provide an atomised flow of the slurry into the chamber;

wherein:

(a) the first lower screen is constructed and arranged to prevent the inert carrier particles from escaping into the hot gas inlet means;

(b) the second upper conical screen has its cone axis coaxial with the cone axis of the second upper conical member;

(c) the second upper conical screen is connected to the second upper conical member adjacent to and surrounding the hot gas exit means; and

(d) the second upper conical screen is constructed and arranged to prevent the inert carrier particles from escaping into the hot gas outlet means.

Please replace paragraph [00013] on pages 6, 7 and 8 with the following amended paragraph below:

[00013] Thus in a second embodiment this invention seeks to provide a jet spouted ~~fuidised~~ fluidised bed drier for the drying of a slurry of biomaterials including in combination:

- a hot gas inlet means constructed and arranged to allow the passage of hot high velocity gas into the bottom of the chamber in a substantially upward vertical direction;

- a first lower conical member in which the cone axis is substantially vertical having its lower narrow end connected to the hot gas inlet and having an upper wide end and a first internal cone angle;

- a first lower screen located in the first conical member adjacent its connection with the hot gas inlet means;

- a cylindrical member in which the cylinder axis is substantially coaxial with the cone axis of the first conical member having its lower end connected to the upper end of the first conical member and having an upper end;

- a second upper conical member in which the cone axis is substantially vertical and coaxial with the cylinder axis of the cylindrical member having its lower wide end connected to the upper end of the cylindrical member and having an upper narrow end and a second internal cone angle;

- a hot gas outlet means connected to the upper narrow end of the second conical member constructed and arranged to allow the passage of hot high velocity gas from the upper narrow end of the second conical chamber in a substantially upward vertical direction;

- a second upper conical screen having a cone axis, an upper wide end, a lower closed end and a third internal cone angle;

- a suitable quantity of inert carrier particles contained within the first and second conical members; and

- at least one inlet port for the slurry of biomaterials constructed and arranged to provide an atomised flow of the slurry into the chamber;

wherein:

(a) the first lower screen is constructed and arranged to prevent the inert carrier particles from escaping into the hot gas inlet means;

(b) the second upper conical screen has its cone axis coaxial with the cone axis of the second upper conical member;

(c) the second upper conical screen is connected to the second upper conical member adjacent to and surrounding the hot gas exit means; and

(d) the second upper conical screen is constructed and arranged to prevent the inert carrier particles from escaping into the hot gas outlet means.

Please replace paragraph [00016] on page 8 with the following amended paragraph below:

[00016] Preferably, the third cone angle is from about ~~60°~~ 30° to about ~~65°~~ 45°. More preferably the third cone angle is about ~~60°~~ 40°.

Please replace paragraph [00018] on pages 8 and 9 with the following amended paragraph below:

[00018] Preferably, the inert carrier particles are fabricated as spheres or cubes. More preferably, the inert carrier particles are fabricated as spheres ~~or cubes~~. Most preferably, the inert carrier particles are fabricated as polytetrafluoroethylene ~~cubes~~ spheres.

Please replace paragraph [00030] on page 11 with the following amended paragraph below:

[00030] Although the hot gas inlet 1, the lower and upper conical members 2, 8 and the hot ~~has~~ gas outlet 13 could be attached together in sequence by other means, the use of the flanged joints 5,11 and 15 has been found to be convenient as it simplifies dismantling of the drier for cleaning internally.

Please replace paragraph [00033] on pages 11 and 12 with the following amended paragraph below:

[00033] As the part numbers carried forward from Figure 1 show, most of the parts of this second embodiment are the same as those shown for the first embodiment. The difference is that a cylindrical member 18 coaxial with the ~~loser~~ lower conical member 2 and the upper conical member 8 is inserted between them. The cylindrical member 18 is attached at its lower end 19 to the upper end 10 of the lower conical member by the fourth flange joint 20. The cylindrical member 18 is attached at its upper end 21 to the lower end 9 of the upper conical member 8 by the fifth flange joint 22. Again, the use of flange joints has been found to be convenient.

Please replace paragraph [00034] on page 12 with the following amended paragraph below:

[00034] Figures 3 and 4 show in more detail the upper conical screen 16. As can be seen in Figure 3, the conical screen is fabricated from a sheet 30 of, for example, steel which is provided with a plurality of round holes 31. If desired, other hole shapes can be used. The maximum effective diameter of the holes ~~13~~ 31 should be about 85% of the effective diameter of the inert particles. The free space provided by the holes 31 and the actual size of the holes is chosen to provide adequate gas flow for the hot gas laden with powder detached from the inert particles in the collision zone and to prevent the loss of

inert particles into the hot ~~has~~ gas outlet 14 (shown in Figure 1). Experience shows that a suitable open area fraction for the holes is from about 55% to about 72%. Experience shows that the third cone angle in the conical screen is from about ~~60°~~ 30° to about ~~65°~~ 45°.

Please replace paragraph [00035] on page 12 with the following amended paragraph below:

[00035] Figure 4 shows one convenient way of sealing the lower pointed end of the conical screen. A conical boss 32 with a top end diameter substantially the same as that of the bottom end 33 of the conical screen 16 (shown in Figure 3) is screwed onto a threaded rod 34 carried by a crossbar 35 inside the conical screen 16.

Please replace paragraph [00036] on pages 12 and 13 with the following amended paragraph below:

[00036] In the conventional jet spouted fluidised bed drier as described by Legros et al. the inlet port(s) are located near to the bottom of the lower conical section of the drier. It is however sometimes desirable to locate the slurry inlet port near to the top of the drier. Figure 5 shows an alternative construction to that in Figure 3 which includes provision for top feed. The conical screen 16 is essentially unchanged and comprises a sheet 30 with a plurality of holes 31. The biomaterial slurry inlet port comprises a tubular member which includes an atomising device, and a spray head 37 which is substantially coaxial with the conical screen 16. In use, the atomised biomaterial slurry is pumped under pressure through the atomiser and sprayed onto the ~~fuidised~~ fluidised spouted flow of inert particles below it through the spray head 37.

Please replace paragraph [00037] on page 13 with the following amended paragraph below:

[00037] There is some choice for the material from which the inert particles may be fabricated. Possible materials include glass, polymer resins, polypropylene, polyethylene, PVC, silica gel, and polytetrafluoroethylene. The factors governing the choice of material are that first it must be able to sustain the effects of multiple collisions without substantial damage. For example, glass cannot be used for products such as dried eggs and dried starch intended for use in food due to the risk of glass powder getting into the finished product. Second, the material must be thermally stable under the operating conditions of the drier. This condition eliminates many plastics, unless the drier is to operate at a comparatively low temperature. Third, it is desirable that the particles are able to accumulate heat relatively quickly. Fourth, the particles need to be substantially inert to the material being dried at the drying temperature. The material which appears to meet these ~~restriction~~ restrictions the best ~~if~~ is polytetrafluoroethylene.